United States Department of Agriculture
NRCS Natural Resources Conservation Service

ENERGY MANAGEMENT (CSP Enhancements) **January 2005**
Colorado Enhancement Activity Job Sheet E-2

Name:

Apply Fertilizer at or Below Agronomic Rate

Payment = $0.70 / Acre / Year to apply nutrients at a rate at or below the agronomic rate.

Nutrients such as Nitrogen (N) that are used in crop production are often applied in large quantities to supplement soil supplies. Nitrogen is typically supplied to crops as ammonium nitrate, diammonium phosphate (DAP), ammonium sulfate, cal-nitro (ammonium nitrate + limestone), or other inorganic form.

The amount of energy needed to produce the nitrogen portion of the fertilizers is massive, taking almost 18,000 kilocalories of energy per one kilogram of nitrogen, requiring a lot of fossil fuels. There is a clear opportunity to save energy by reducing unneeded N applications. These can be made by allocating more N to the crop situations with the greatest potential response and less N to the situations where it is not needed. This may be achieved by limiting fertilizer inputs so that available nutrients are equal to the amount that will be used by a crop during the growing season. This amount is referred to as the agronomic rate. To achieve this, the producer must closely evaluate the requirements for each crop rotation, soils and climate. The agronomic rate is based on current soils test and university crop production handbooks.

Documentation Required: Farmer or crop consultant certification of appropriate fertilizer applications. Use the following Table to document fertilizer application. An example is provided to assist you.

Tract & Field #s or Names	Acres	Crop	Nutrient	Agronomic Rate	Applied Rate	Date Applied
T486 – 1	120	Wheat	N (Example)	140	100	2/15
T486 – 1	120	Wheat	N	140	40	3/22

(***Form on following page***)

Tract & Field #s or Names	Acres	Crop	Nutrient	Agronomic Rate	Applied Rate	Date Applied

Agronomic Rate Nutrient Application Certification:

I certify that I have applied nutrients at or below the “Agronomic Rate” to the fields listed in the table above.

Name: _____ **Date:** _____